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Chapter 3: Control into finite clauses in partial null subject languages

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1 Introduction *

This paper focuses on three partial null subject languages: Brazilian Portuguese, Finnish and Marathi, which allow null subjects under more restricted conditions than consistent null-subject languages. The conditions include;

- a) When the subject is non-thematic,
- b) when the subject is a generic pronoun corresponding to English ‘one’ (exemplified by (1a), from Marathi), and
- c) when the subject is controlled by an argument in a higher clause (exemplified by (1b), also from Marathi).

- (1) a. unahlyat lavkar utthavla jato [Marathi]
summer-in early wake go-prs-3sm
‘In summer one wakes up early’
- b. Ram mhanala ki ghar ghetla [Marathi]
Ram say-pst-3sm that house buy-pst-3sn
‘Ram said that he bought a house’

Holmberg (Chapters 2 and 5) and Holmberg, Nayudu and Sheehan (in press) argue that property (b) is particularly revealing. It shows that the languages lack a D(efinite)-feature in T: the feature which makes a null subject with definite interpretation possible in consistent null-subject

languages. Following the proposal laid out in Holmberg (Chapter 2), we adopt an analysis of the sentential feature composition of partial null subject languages based on T's lack of this D feature coupled with the lack of a 'phonological EPP' in these languages, formally a feature [P] in T, as evidenced by property (a)

The focus of this paper, however, will be to examine the conditions under which null subjects of type (c) are possible in the three languages. A careful examination makes it clear that the conditions under which the languages allow a controlled, externally licensed null subject vary to some extent, sometimes in puzzling ways. It is our contention, however, that the control relation they display is uniform and distinct from both the obligatory control (OC) and non-obligatory control (NOC) of non-finite and finite clauses (cf. Landau 2004), and from the discourse-based antecedence relation characteristic of consistent null subject languages, (cf. Samek-Lodovici 1996, and Frascarelli 2007). This paper will be concerned with characterising the differences in the distribution of null subjects in the languages in question and deriving these facts from independent parametric differences between the three languages, largely from the OV status of Marathi vs. the VO status of BP and Finnish. The other main aim of the paper will be to derive the differences between this control relationship and OC from the type of agree relation it instantiates.

Section 2 will focus on the characterisation of partial null subject languages, as distinct from consistent null subject languages and non null subject languages. Section 3 will sketch the analysis of consistent null subject languages and partial null subject languages given in Holmberg (Chapter 2), relating it to the typology of pro-drop. In section 4 we will describe, at length the differences between this kind of finite control and the finite OC described by Landau (2004), the interaction with different matrix verb types and island sensitivity. It will become apparent that

there are many differences between the licensing of null subjects in the three languages, but that many of these differences are derivable from independent parameter settings. Finally, in section 5 we will return to Landau's control calculus and consider how the null subjects discussed here are related. Section 6 concludes our discussion, raising some issues for future research.

2 Partial and consistent null subject languages

2.1 Null subjects that are not licit in partial null subject languages

As a rough characterisation, null subjects in partial null subject languages are optional in some contexts where they are obligatory in consistent null subject languages and excluded in non null subject languages, whilst being excluded in other contexts where they are allowed in consistent null subject languages. The following is an illustration: Consider (2), where John is talking about himself, as indicated by the indexing.

(2) John₁ said that he₁ bought a house.

In a non-null subject language such as English the pronoun has to be overt. In a consistent null subject language, such as Arabic, Greek, Spanish, Turkish, etc., the pronoun has to be null, assuming that there is no contrast or shift of topic involved. In partial null subject languages the pronoun is optionally null, the null-option exemplified in (1b) for Marathi.

Now imagine a context where another person, call him Bill, is being discussed. One of the interlocutors utters (3) as a contribution to the discussion, where the embedded pronoun refers to Bill, as indicated by the index 2.

(3) John₁ said that he₂ bought a house.

In a non-null subject language such as English the pronoun has to be overt. In a consistent null subject language the pronoun would still typically be null, assuming no contrast or topic-shift. In a partial null subject language the pronoun has to be overt in this case.¹

We exemplify the difference between the three types with an embedded subject pronoun because a wider range of languages, including at least some partial null subject languages and non-null subject languages, allow null subjects in main clauses derived by ‘topic drop’ (see Rizzi 1992, Haegeman 2000 and Rodrigues 2002). Even so, the example involves a certain amount of idealization; for example, there are languages which have some properties of partial null subject languages, but allow a null subject even in (3), and languages with some properties of partial null-subject languages which do not allow a null subject even in (2), and languages which are otherwise consistent null-subject languages, yet do not allow a null subject in (3).²

Considering just the three languages under investigation in this paper, there is another complication, which is that Finnish permits 1st and 2nd person null subjects in basically any context (although more commonly in formal and written Finnish). 3rd person pronominal subjects, though, are subject to constraints which do not apply in consistent null subject languages, but which closely resemble those which hold for BP and Marathi. We will, from now on, deal with 3rd person subjects only.³ It should also be clarified here that we are discussing spoken Marathi and Brazilian Portuguese. Interestingly, the written variety of Marathi is more restrictive in its use of null subjects, whereas the opposite is true in BP and Finnish, where the written form uses more null subjects than the spoken variety.⁴ For the purposes of this paper, we will use the term ‘partial null subject language’ strictly for languages that have properties (a) and

(b).⁵ The following sections will illustrate the cases where the languages in question have null subjects, either optionally or obligatorily, in comparison with consistent null subject languages and non null subject languages.

2.2 Null non-thematic subject

With predicates which do not have a theta-marked subject the partial null subject languages generally have no overt subject. One such case is weather-predicates.⁶

- (4) a. Está chovendo. [BP]
 Is raining
 ‘It’s raining.’
- b. Ulkona sataa. [Finnish]
 outside rains
 ‘It’s raining outside.’

In Marathi, a different kind of structure is used in these instances, equivalent to ‘rain falls’.

2.3 Null generic subject pronoun

One situation where a null subject is licit in finite clauses in our three partial null subject languages is when the subject is a generic pronoun corresponding to ‘one’.

- (5) a. É assim que faz o doce. [BP]
 is thus that makes the sweet

‘This is how one makes the dessert.’

- b. Nesse hotel não pode entrar na piscina bêbado

in-this hotel neg can enter in-the swimming-pool drunk

‘In this hotel it is not permitted to go in the swimming pool drunk.’⁷

[BP, Rodrigues 2004:72]

- (6) a. Kesällä herää aikaisin. [Finnish]

in-summer wake-PRS.3S early

‘In the summer one wakes up early.’

- b. Täällä ei saa uida.

here not-3S may-PRS swim

‘One must not swim here.’

- c. Nuorten mielipiteitä kuuluu arvostaa.

youth’s opinions should-PRS-3S respect

‘One should respect the views of young people.’

- (7) a. unahlyat lavkar utthavla jato [Marathi]

summer-in early wake go-PRS-3SM

‘In summer one wakes up early’

- b. asa lokan kade baut dakhavayla paidze nahi

like this people towards finger show-INF- DAT should NEG.AUX

‘One should not point at people’.

- c. mulan-chya vicharan-cha aadar kar-ay-la paidze

children’s views respect do-INF- DAT should

‘One should respect the views of young people’.

Interestingly, in this case consistent null subject languages such as Spanish and Greek, do not allow a plain null subject, but have to resort to some overt strategy. The contrast is seen most clearly when comparing BP, a partial null subject language, with European Portuguese (EP), a consistent null subject language. Compare (5) and (8):

- (8) a. É assim que **se** faz o doce.⁸ [EP]
is thus that SE makes the sweet
‘This is how one makes the dessert.’
- c. Nesse hotel não **se** pode entrar na piscina bêbado. [EP]
In-this hotel neg SE can enter in-the swimming-pool drunk
‘In this hotel it is permitted to go in the swimming pool drunk.’

In EP, the generic subject reading requires the reflexive clitic *se*. This clitic is either itself the generic pronoun, or serves to somehow license a null generic pronoun; see Holmberg (Chapter 2). In either case it holds that a plain 3SG null subject with no special morphology is not an option in EP or the other Romance consistent null subject languages, in this context.

It is important to make a distinction in this connection between *generic* and *arbitrary* null subject pronoun. By *generic pronoun* we mean a pronoun best translated into English as either ‘one’ or ‘you’, the semantic defining characteristic being that it denotes people in general including the speaker and the addressee. By *arbitrary* we mean a pronoun which is best translated into English as *they*, as in *They speak many different languages in India*, the semantic defining

Other consistent null subject languages use other strategies to express inclusive generic meaning, such as using an overt indefinite, or passive voice, or some other dedicated impersonal voice, or generic ‘you’, which may be null but visible on the verb agreement ; see Holmberg (Chapter 5). None of them employs a null 3rd person generic subject in a construction with an active, 3SG-marked verb. There is a potential functional explanation for this: In a consistent null-subject language a null 3rd person subject will be interpretable as a definite pronoun. Remove *se* from (8a), for example, and the sentence can be read as ‘This is how he makes the dessert.’ In BP this does not happen, as the language does not have definite null subjects. The reason why consistent null subject languages resort to overt strategies to express a generic null subject would thus be to avoid ambiguity. This cannot be correct, however, as there are some languages which allow genuine ambiguity of this kind. Consider the case in Cantonese and Japanese:⁹

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In fact, a degree of ambiguity also arises in partial null subject languages in certain circumstances. We therefore conclude that the explanation for this difference cannot be purely functional.

2.4 Null subject controlled by an antecedent in a higher clause

Another situation where BP, Finnish, and Marathi all allow a null subject is when there is a linguistic antecedent in a higher clause:

- (10) a. O João₁ disse que (ele₁) tinha comprado uma casa [BP]
 the João said that he have-PST.3SG bought a house
 ‘João said that he had bought a house.’

- b. Os meninos₁ ficavam contentes quando (eles₁) tinham um dia de folga
 the children were happy when they have-PST.3PL a day of holiday
 ‘The children were happy when they had the day off.’

- c. A Maria₁ admite que (ela₁) não fala muito bem inglês.
 The Maria admits that she not speak-PRS.3SG very well English
 ‘Mary admits that she doesn’t speak English very well.’

- (11) a. Juhani₁ kertoi että (hän₁) oli ostanut omakotitalon. [Finnish]
 Juhani said that he have-PST.3SG bought house
 ‘Juhani said that he had bought a house.’

- b. Lapset₁ olivat mielissään kun (he₁) saivat vapaapäivän.

children were pleased when they get-PST.3PL off-day

‘The children were pleased when they got a day off.’

- c. Marja₁ myöntää ettei (hän₁) puhu englantia hyvin.

Mary admits that-not-3SG she speak-PRS English well

‘Mary admits that she doesn’t speak English well.’

- (12) a. Ram₁ mhanala ki (tyani₁) ghar ghetla [Marathi]

Ram say-PST.3SM that he house buy-PST.3SN

‘Ram said that he bought a house’.

- b. mulan-la₁ khushi dzali dzewha (tyan-la₁) shalyat-hun

children-DAT happy happen-PST.3SF when they-DAT school-from

radza milali

off get-PST-SF

‘The children were happy when they got a off from school’.

- c. Seema₁ kabul karte ki (ti₁) chukli

Seema agree do-PRS.SF that she mistake-PST.3SF

‘Seema admits that she made a mistake’.

These types of null subjects will constitute the main focus of this paper.¹⁰

2.5 Pronouns with inanimate reference

In BP, Finnish and Marathi, this class of pronouns behaves exactly like those which refer to animate referents: As subjects they are overt unless controlled. In at least some consistent null subject languages, including the Romance null subject languages, this is not the case, as pronouns

which refer to inanimate objects are always null. This is not always the case, however, as inanimate pronouns can be overt in Arabic, another consistent null subject language.

2.6 Summary of the properties of partial null subject languages

The following provides a summary of the properties of the different types of null subject languages.

Table 1: Summary of the properties of partial null subject languages

	Consistent null subject language	Partial null subject language	Non null subject language
Example languages	Spanish, Greek, Turkish ¹¹ , Arabic, Telugu	BP, Finnish, Marathi,	English, French ¹² , Sorbian ¹³ , Somali ¹⁴
Non-root, non-controlled ‘topic’ pronouns	null	overt	overt
Inanimate subject pronouns	often null	Overt/null if controlled	overt
Controlled subject	null	null/overt (optional)	overt
Generic null subjects	overt	null	overt
Non-thematic subjects	null	null	overt

Interestingly, the distribution of null subjects works largely on a continuum across the various language classes, with the exception of generic pronouns. We take this to be a crucial property of partial null subject languages. Following Holmberg (Chapter 2), we take it to indicate that T lacks a [uD] (definite) feature, allowing incorporated pronouns to get a generic, rather than a definite interpretation.

3 Null subjects in Partial null subject languages

Holmberg (Chapter 2) provides an account of consistent null subject languages based on Roberts’ (2007, Chapter 1) analysis of clitics as incorporated pronouns and Frascarelli’s (2007) analysis of null subject languages. It proposes that partial null subject languages differ from consistent null

subject languages in the following way: In consistent null subject languages, T has an unvalued uD-feature, where D encodes definiteness. This feature gets valued by the subject as part of Agree, the probe-goal relation between T and the subject (cf. Chomsky 2001). In the null subject case, the subject is a D-less ϕ P (made up of valued ϕ -features but no D). This is incorporated in T as a result of Agree (see Holmberg (Chapter 2 and 5) and Roberts (Chapter 1) for details), while the uD-feature gets valued definite by a null topic in specCP (following Frascarelli 2007). The result is a ‘null subject’ which is a chain headed by T, valued definite, spelled out as an inflection on the verb or auxiliary.

In other languages finite T does not bear a [uD] feature. In a subset of these languages, the partial null subject languages, the subject can still be null, essentially by the same derivation as in the consistent null subject languages: A bare ϕ P subject can be incorporated, as a direct result of Agree. However, in the absence of a uD-feature the resulting chain can only be interpreted as generic or arbitrary, and these are the interpretations we find in partial null subject languages. A subject pronoun which is not incorporated in T is attracted by the EPP to remerge with TP. Such a pronoun can be null if it is controlled by a DP in a higher clause. Control is, by hypothesis, only possible if the controlled pronoun is referentially deficient, yet not to the extent that it gets incorporated in T. We propose to capture this in terms of an unvalued D-feature, uD; see Shlonsky (to appear) for a similar analysis. This would also be the case for so-called PRO in non-finite clauses.

In finite clauses, this type of null subject is typically found in partial null subject languages (though perhaps not exclusively; see Holmberg, Chapter 2). As discussed in Holmberg (Chapter 2 and 5), the theory predicts that generic/arbitrary null subjects, being incorporated in T,

will not satisfy the EPP, but definite null subjects which are controlled will do so. This prediction can be shown to be right. Consider **Error! Reference source not found.:**

- (13) a. João me contou que na praia vende cachorro quente [BP]
 João me told that at.the beach sell-3Sg dog hot
 ‘João told me that hot dogs are sold at the beach ’
 ≠ ‘João told me that he sells hot dogs at the beach’
- b. João₁ me contou que (ele₁) vende cachorro quente na praia
 João me told that sell-3Sg dog hot at.the beach
 ‘João told me that he sells hot dog at the beach’
 ≠ ‘João told me that hot dogs are sold at the beach’ (Rodrigues 2004:142)

In Finnish as well as BP the EPP is mostly satisfied by the subject, but may be satisfied by other referential categories, including circumstantial adverbials. In (13a) the subject pronoun is incorporated in T, with generic interpretation. In this case another category, here a place adverbial, is attracted by the EPP to specTP (i.e. to remerge with TP). In (13b) the subject has moved to specTP, satisfying the EPP. In this position it can be null, but only if it is controlled, which it is in this case. See Holmberg (Chapter 5 on Finnish). In Marathi the prediction cannot be so easily tested since due to its SOV syntax all arguments and adjuncts precede the finite verb anyway.

It appears, then, that the definite null subjects in BP, Finnish, and Marathi are referentially deficient DPs which have been remerged with TP and are interpreted by virtue of control.

If Frascarelli (2007) is right, the relation between the null subject and its antecedent in consistent null subject languages is indirect: The direct antecedent of the null subject is a null Aboutness-topic in specCP. This topic is itself interpreted as a copy of a topic in a preceding sentence. It is therefore irrelevant whether this, the ‘ultimate antecedent’ does or does not c-command the null subject. In partial null-subject languages, on the other hand, the indirect antecedence relation, via a null Aboutness-topic, is impossible due to absence of a uD-feature in T which could transmit the topic’s index to the null subject.

4 Control of null subjects in finite clauses

As discussed, BP, Finnish, and Marathi all allow null subjects in finite clauses controlled by an antecedent in a higher clause. But unlike in consistent null-subject languages, the antecedent argument controls the null subject directly (rather than via a null-topic chain). In this respect it is more similar to OC of PRO. However, as we will show here, the type of finite control relation displayed by the three languages under investigation is substantially different from OC.

4.1 How the relationship differs from obligatory control

In the most detailed investigation to date about control into finite clauses, Landau (2004) discusses the case of Hebrew, another partial null-subject language. Hebrew has object control into finite complements of directive verbs, that is verbs of requesting, ordering, proposing etc.:

- (14) Rina himlica le-Gil₁ še-Ø_{1/*2} ya’avod yoter kaše.
 Rina recommended to Gil that will-work.3sg.M more hard
 ‘Rina recommended to Gil that he should work harder.’

Futhermore Hebrew has subject control into complements of commissive verbs, such as ‘promise’ and ‘declare’, and more marginally into complements of epistemic and declarative verbs (‘believe’, ‘mention’, etc.).

- (15) [Sar ha-ocar]₁ hic’hir še-Ø_{1/*2} yorid et ha-misim.
 minister the-treasury declared that will-lower.3sg.M ACC the-taxes
 ‘The minister of the treasury declared that he would lower the taxes.’

- (16) [Sar ha-ocar]₁ hosif še-hu₁/?Ø_{1/*2} yorid et ha-misim.
 minister the-treasury added that will-lower.3sg.M ACC the-taxes
 ‘The minister of the treasury added that he would lower the taxes.’

Landau shows that these complements have in common (with the exception of the marginal epistemic/declaratives) (a) that they have obligatory future tense, and (b) that they correspond to subjunctive complements in other languages. He compares these Hebrew constructions with control into subjunctive complements in Balkan languages, notorious for lacking infinitival clauses, and argues that the complement clauses in (14)-(15) are actually ‘covertly subjunctive’ in Hebrew, too. Furthermore, he argues that what non-finite complement clauses subject to OC and subjunctive clauses have in common is that they have dependent tense. This, he argues, is a necessary condition for OC. He argues that the control relation in (14)-(16) is indeed OC, and thus that the null subject is effectively PRO, not *pro*.

Interestingly, while it appears that finite control in Hebrew and the other languages Landau discusses can be identified with OC, the kind of finite control seen in Finnish, Marathi and BP differs

from OC in many important respects. We will first discuss the apparent similarities between the two types of control, and then the many differences.

4.2 Similarities with obligatory control

Descriptively, both OC and the control relation in BP, Finnish and Marathi appear to be a form of syntactic binding between an antecedent and a null category. The two relations share some properties. In all of the three languages under discussion, the antecedent for the null subject can be +/-human, as is the case with OC:¹⁵

(17) This wood₁ is dry enough [PRO₁ to catch fire].

(18) Talo₁ kyllä paranee jos (se)₁ saa uuden katon.
house surely improves if it gets new roof
'The house will surely improve if it has a new roof.'

(19) O avião₁ não portava nenhum passageiro quando (ele)₁ caiu.
the airplane not carried any passengers when it fell

(20) viman-ni₁ aag pakadli dwehwa (te)₁ zamini-la aadalə
plane-ERG fire catch-past-3SF when it ground-DAT crash-past-3SN
'The plane caught fire when (it) crashed to the ground'.

This shows that the relation is not logophoric, in the classical sense discussed in Sells (1987). In the logophoric relation the embedded clause containing the logophoric pronoun is a report of the mental state of the antecedent, or reports an event or state of affairs seen from the point of view of the antecedent (cf. Sells 1987). As all three languages allow inanimate controllers, the relevant relation clearly cannot be logophoricity.

4.3 How this control differs from obligatory and non-obligatory control

In Marathi, Finnish and BP, it is possible to have independent time reference in matrix and embedded clauses where the latter contains a null subject, as illustrated by this example from Marathi:

- (21) Seema₁ kabul karte aaj ki (ti-chya-ni₁) kal chuk dzali
 Seema agree does today that she-ERG yesterday mistake made
 ‘Seema admits today that she made a mistake yesterday’.

In this respect, these three languages immediately differ from Hebrew and the other languages discussed by Landau (2004), in which dependent tense is a prerequisite for finite control.

In fact, despite apparent similarities, many aspects of the licensing of null subjects in the languages under discussion differ from OC. Landau (2000:113ff) shows that a crucial property of OC is the ‘next-clause-up’ restriction. It can be shown that all cases of control across an intervening clause are instances of NOC. Compare (22) and (23). In (22) long distance control of the embedded PRO is possible across an intervener, whereas in (23) it is not. This shows that (22) is an instance of NOC, not OC:

- (22) a. John thinks it is necessary PRO to shave ?himself/oneself.
 b. John thinks Mary said it was necessary PRO to shave ?himself/oneself.
- (23) *John₁ thinks Mary plans PRO₁ to shave himself₁/oneself.

In previous studies it has been claimed that a similar restriction applies in Finnish (Holmberg 2005), and BP (cf. Modesto 2000, Rodrigues 2004). In actual fact, we will show that these effects are due only to intervention rather than locality per se.¹⁶

None of the three languages allows a control relation across another subject, even if that subject has features incompatible with the null subject (visible on the embedded finite verb or adjective). Marathi is possibly somewhat less strict than BP and Finnish in this regard, though.

- (24) a. O João₁ disse [que os moleques acham [que *(ele)₁ é esperto]]
 the João said that the kids think that he is smart
 ‘João said that the children think that *he/ is smart.’
- b. Jari sanoo [että lapset uskovat [että *(hän) kävi tohtorilla]]].
 Jari says that children believe-3PL that he visited-3SG doctor-ADE
 ‘Jari says that the children believe that he went to see a doctor.’
- c. Ram-ni₁ mhantlə ki Mary-la watlə ki ?(to)₁ doktaran-kade
 Ram-ERG said-3SN that Mary-ACC thought-3SN that he doctor -to
 gela
 went.3SM
 ‘Ram said that Mary thought that he went to the doctor’.

This can be seen as an instance of defective intervention, of the kind discussed by Chomsky (2000). Implicit (non-PF-realised) arguments also act as interveners so that apparent locality conditions of the following kind can be attributed to this effect:

(25) Marja sanoo [että on ilmeistä [että *?(hän) saa ensi vuonna ylennyksen]].

Marja says that is obvious that she gets next year promotion

‘Marja says that it’s obvious that she will get promotion next year.’

The predicate ‘obvious’ has an implicit experience argument which may block agreement between the subject in a higher clause and the null subject (see also footnote 1). Crucially though, when the intervening clause contains no argument all three languages tolerate control by an argument which is more than one clause away. Predicates like ‘true’ and ‘certain’ differ from ‘obvious’ in this respect:

(26) a. A Maria₁ disse [que é verdade [que (ela)₁ entornou o copo]] [BP]

The Maria said that is true that she knocked over the glass

‘Maria said it’s true that she knocked over the glass.’

b. Marja₁ sanoo että on varmaa että (hän)₁ saa ensi vuonna ylennyksen. [Finnish]

Marja says that is certain that she gets next year promotion

Marja says that it’s certain that she will get a promotion next year.’

c. Ram-la₁ watto [ki he changla dzala [ki (to)₁

Ram-DAT thinks-3SM that this good happen-PST that he

doktaran-kade gela]]].

doctor-to go-PST-3SM

‘Ram thinks that it was good that he went to the doctor’

Thus, in some ways it seems that the finite control in BP, Marathi and Finnish is less strict than that seen with PRO. However, in another way the finite control under discussion is actually stricter, as it relies crucially on c-command. A null subject in BP and Marathi, and with some exceptions Finnish must be c-commanded by its antecedent. The only exception to this condition is that Finnish, but not BP or Marathi, allows control under connectivity by specificational predication, a construction which permits OC into non-finite clauses without c-command (cf. Holmberg, Nayudu & Sheehan in press, Lyngfelt 2002):

- (27) a. John’s plan was [PRO to shave himself and then leave].
 b. It’s in Jane’s interest [PRO to be on time].
 c. It was a disappointment to John [PRO to be dropped from the team].

Note that a lack of c-command between antecedent and null subjects results in ungrammaticality in BP and Marathi even under specificational predication conditions.:

- (28) O plano do José₁ realizou-se quando *(ele)₁ ganhou o premio. [BP]
 The plan of José realised-itself when he won the prize
 ‘José’s plan came true when he won the prize.’

- (29) John-ch vichar hotə ki *(to) lawkar nighel. [Marathi]

J-GEN plan was that he early leave-FUT

‘Jon’s plan was that he would leave early.’

In instances of connectivity, though, a non-c-commanding antecedent can bind a null subject in Finnish:¹⁷

- (30) a. Jarin₁ suunnitelma oli [että (hän₁) ajaisi yhdessä päivässä
 Jari’s plan was that he drive-CON one-INE day-INE
 Helsingistä Ouluun].
 Helsinki-ABL Oulu-ILL
 ‘Jari’s plan was that he would drive in one day from Helsinki to Oulu.’
- b. Se oli pettymys Tarjalle [ettei (hän) saanut mennä mukaan].
 it was disappointment Tarja-ALL that-not she could go along
 ‘It was a disappointment to Tarja that she couldn’t go along

In other contexts c-command is a requirement for control into finite clauses in Finnish, too, though. Consider the contrast between (31), where *Jari* cannot control the null subject even though pragmatically it is the only possible antecedent, and the roughly synonymous (31), where it c-commands and licenses the null subject.

- (31) a. [Jarin puhe] teki selväksi ettei *(hän) ole syyllinen.
 Jari’s speech made clear that-not he is guilty
 ‘Jari’s speech made clear that he isn’t guilty.’
- a. Jari teki puhessaan selväksi ettei (hän) ole syyllinen.

Jaro made speech-INE-his clear that-not he is guilty

‘Jari made it clear in his speech that he isn’t guilty.’

There are some well-known tests for OC, distinguishing between OC and NOC. OC but not NOC requires sloppy identity in a case like (32) and a bound reading in a case like (32); see Landau (1999: 43, 2000), Hornstein (1999).

- (32) a. John expects to win, and so does Mary.
b. Only John expects to win.

(32b) can only mean ‘John is the only x who expects x to win’ (the bound reading), and cannot mean ‘John is the only x who expects John to win’ (the coreferential reading). Applying these tests to BP and Finnish yields contradictory results. According to Negrão (1997) cited by Modesto (2000, to appear), Ferreira (2004) and Rodrigues (2004), (33) can only be interpreted with sloppy identity, and (34) can only have a bound reading.

- (33) O João₁ [acha [que Ø vai ganhar a corrida]] e a Maria também
the João thinks that go win the race and the Maria also
(i) ‘João thinks he’s going to win the race and Maria thinks she will too.’ [sloppy]
(ii)*‘João thinks he’s going to win the race and Maria thinks he will too.’ [strict]

- (34) Só o José acha que Ø vai ganhar as eleições.
(i) ‘José is the only candidate who expects to win the elections.’ [bound]

- (ii) *‘José is the only person who expects José to win the elections.’ [co-ref]

In Finnish we do not get this effect.

- (35) Marja luulee että (hän) on ovela, ja niin luulee Jarikin.

Marja thinks that she is clever and so thinks Jari-too

‘Marja thinks that she is clever, and so does Jari.’

- (36) Vain Jari uskoo että Ø voittaa vaalit.

only Jari thinks that wins elections

‘Only Jari thinks that he will win the elections.’

(35) allows a strict or a sloppy reading, regardless whether the pronoun is overt or covert. (36) allows the bound reading but also allows the coreferential reading.

Similarly in Marathi, (37) allows a strict or a sloppy reading, regardless of whether the pronoun is overt or covert.

- (37) Seema-la wattə ki (ti-ni) hi pustak vaachli aahe ani tasach

Seema-ACC thinks-3SN that she-ERG this book read is and similarly

Ram-la pan wattə

Ram-ACC also thinks-3SN

‘Seema thinks that she has read this book, and so does Ram.’

(38), likewise, allows a bound as well as a coreferential reading, whether the pronoun is overt or covert.

- (38) ho, Ram-la wattə ki (to) jinkel
yes Ram-ACC thinks-3SN that he win-FUT
'Yes, Ram thinks that he (himself) will win'

Thus it can be the answer to either the question (39), or (39):¹⁸

- (39) a. kontya-hi umiddhwar-la wattə ka ki to jinkel?
who-EMPH candidate-ACC thinks-3SN QM that he win-FUT
'Does any candidate think that he will win?'
- b. kontya-hi umiddhwar-la wattə ka ki Ram jinkel?
who-EMPH candidate-ACC think-PRES-3SN QM that Ram win-FUT
'Does any candidate think that Ram will win?'

A well known difference between OC and NOC is that only NOC allows split antecedents.

In BP, split antecedents are acceptable in some limited contexts:

- (40) O Zé convenceu os meninos que tinham que ir embora
The Ze convinced the kids that had that go away

‘Ze convinced the kids that they (all) has to leave.’

In fact, the only reading possible in (40) is that with split antecedents. The reading where the null embedded subject refers only to *meninos* is ungrammatical for all speakers consulted (see also Modesto 2000a, 200b, Rodrigues 2004).

In Marathi a null subject in a finite embedded clause can have split antecedents.

- (41) Mary-ni Lucy-la sangitl ki (te) ekatr jau shaktat
MARY-ERG Lucy-ACC said -3SN that they together go happen-PRES-3PL
‘Mary told Lucy that they can-3PL travel together.’

In Finnish, split antecedents are unacceptable or at least degraded when compared with a non-split antecedent.

- (42) a. Marja kertoi Jarille etteivät ??(he) voi matkustaa yhdessä.
Marja told Jari that-not-3PL they can travel together
- b. Marja kertoi Jarille ettei (hän) voi matkustaa hänen kanssaan.
Marja told Jari that-not-3SG she can travel him with

We contend, that even in Finnish, the degree of acceptability is far better than that seen in instances of OC, as in (43) and (44), for example.

(43) *Mary told John to leave together.

(44) *Marja pyysi Jaria [PRO matkustamaan yhdessä].

Marja asked Jari travel-INF together

4.4 Summary of similarities and differences

Table 2: comparison of control in partial null subject languages and with English PRO

	BP	Finnish	Marathi	English OC PRO
Binder must be + human	N	N	N	N
Independent time ref.	Y	Y	Y	N
Next clause up condition	N	N	N	Y – otherwise it is NOC
binder must c-command <i>pro</i>	Y	N – control under connectivity	Y	N - control under connectivity
Split antecedents allowed?	Y – in restricted contexts	Y	Y	N
sloppy reading only with ellipsis?	Y	N	N	Y

As is clear from the above chart, the control relation in finite clauses in partial null subject languages is distinct in several crucial ways from that in OC. We will return to the reason for these differences in section 6.

5 Control with different verb types

Landau (2004) discusses five basic verb types and how they interact with non-finite and finite control. To his list, we add ‘communicative verbs’ which differ from directive verbs in allowing only finite complements, and not triggering subjunctive morphology and dependent tense in their complement clause.

Table 3: Landau’s (2004) verb types (amended)

Verb type	English examples	OC pattern
commissive	<i>declare, promise, vow, threaten</i>	Always subject control, even across object
communicative	<i>Inform, tell, point out, say</i>	No non-finite complements
epistemic	<i>think, add, state</i>	No non-finite complements
directive	<i>tell, ask, convince, persuade, encourage</i>	Object control
factive	<i>be glad, regret, know</i>	Subject control, no matrix object
desiderative	<i>need, want</i>	ECM

In the following sections we describe the distribution of null subjects with these verb types in Marathi, Finnish and BP, as compared with the distribution of PRO and finite control in Hebrew. Again, some marked differences emerge.

5.1 Complements of epistemic verbs

All three partial null subject languages allow subject control into complements of verbs of saying, thinking, and perceiving, the groups of verbs which Landau (2004) terms *epistemic*:

- (45) a. O João₁ disse que (ele₁) tinha comprado uma casa .
 the João said that he had bought a house

‘João said that he had bought a house.’

- b. Marja₁ luulee että (hän₁).on hyvän näköinen.

Marja thinks that she is good looking

- c. Seema₁ kabul karte ki (ti-chya-ni₁) chuk dzali

Seema agree does that she-ERG mistake made

‘Seema admits that she made a mistake’.

Note that epistemic verbs do not typically take non-finite complements and so no comparison with non-finite control can be made:

- (46) *John believed/stated [PRO to leave]

In Hebrew and the other languages discussed by Landau (2004) finite control is only marginally possible with these verbs, as they do not select complement clauses with dependent tense.

5.2 Directive verbs

Several directive verbs in Finnish take a finite complement (e.g. *ehdottaa* ‘propose’, *suositella* ‘recommend’, *sanoa* ‘tell (someone to do something)’). In such cases, object control of a null embedded subject is possible (somewhat marginally).

- (47) a. Jari₁ ehdotti Tarjalle₂ [että (hän*_{1/2}) ostaa uuden telkkarin].

Jari suggested Tarja-ALL that she buys new TV

‘John suggested to Tarja that she should buy a new TV.’

In BP, directive verbs most naturally take a non-finite complement, with a controlled PRO, as in (48b). However, finite subjunctive complements are also possible in formal registers, and in such case a null subject is possible, as in (48a).

- (48) a. A Maria sugeriu ao José₁ que (ele₁) fosse embora.
 the Maria suggested to.the João that he go.IMP./SUBJ away
 ‘Maria suggested to João that he go away.’
- b. A Maria sugeriu pro José PRO ir embora
 the Maria suggested for-the José go.INF away
 ‘Maria suggested for José to go away.’

In Marathi, too, directive verbs normally take non-finite complements, but can be somewhat marginally construed with a finite subjunctive complement. To the extent that finite subjunctive complements are possible in Marathi, null subjects are banned:

- (49) Ram-ni Arun-la shikawlə ki *(tya-ni) mothyaan-cha aader karavə
 Ram-ERG Arun-ACC taught that he-ERG elders-of respect do-SUBJ
 ‘Ram taught Arun that he should respect the elders’.

This is a context where Hebrew happily allows object control, provided that the embedded clause is temporally dependent (future relative to the time of the matrix clause) and generally has a subjunctive-like dependent relation to the matrix clause (Landau 2004; See also Gutman 2004).

Marathi simply seems to lack the kind of finite control described by Landau, whereas BP and Finnish marginally allow it. In all three languages, control into the complement clauses of epistemic verbs is far better, which is the reverse of the situation in Hebrew and the other languages described by Landau (2004).

5.3 Subject control with commissive verbs

All three languages permit subject control with commissive verbs like *declare*, *promise*, and *vow* which also require subject control with PRO, as illustrated by the following English and BP examples:

(50) I₁ promised John₂ [PRO_{1/*2} to be there on time]

(51) O João prometeu à Maria que iria embora

The João promised to-the Maria that would-go away

‘João promised Maria that he would leave.’

5.4 Subject control with factive verbs

Both BP and Finnish allow subject control into the complement of a factive verb. Marathi, however, does not. We return to this contrast 6.3, claiming that it is a side effect of the fact that Marathi fails to allow control into DPs more generally, assuming factive complements to be covert DPs.

5.5 Verbs of communication

The most interesting contrast between BP and Finnish on the one hand, and Marathi on the other hand, comes from what we term communicative verbs (‘tell (somebody something)’, ‘inform’,

‘remind’). With such verbs Marathi allows object control, somewhat surprisingly. In BP and Finnish this is a marginal possibility, at best.

- (52) a. John-ni₁ Mary-la kalav-l-ə ki Ø₁/ to_{1/2} parikshet pas
 John-ERG Mary-DAT informed-PST-3SN that he exam-in pass
 dza-l-a
 happen-PST-3SM
 ‘John informed Mary that he passed the test’.
- b. John-ni Mary-la₁ kalav-l-ə ki Ø₁/ ti_{1/2} parikshet pas
 John-ERG Mary-DAT inform-PST-3SN that she exam-in pass
 dza-l-i
 happen-PST-3SF
 ‘John informed Mary that she passed the test’.
- c. Lucy-ni₁ Mary-la₂ kalav-l-ə ki Ø_{*1/2} / ti_{1/2/3} parikshet pas
 Lucy-ERG Mary-DAT inform-PST-3SN that she exam-in pass
 dza-l-i
 happen-PST-3SF
 ‘Lucy informed Mary₂ that she₂ passed the exam’.

In (52) the embedded verb is inflected for masculine, consequently only the subject is a possible controller of the null subject. In (b) the inflected verb is feminine, and the only possible controller is the matrix object. In (c) there are two c-commanding DPs with features compatible with those of the null subject. In this case the closer one, that is the object, is the antecedent. This shows

that in Marathi, the class of potential interveners is, in this case, relativised to those which are phi-compatible.

Neither Finnish nor BP mark gender on verbal agreement morphology, but a similar effect does hold in Finnish, with plural morphology. In Finnish, the subject is the preferred controller in the case where the embedded verb inflection is compatible with both subject and object control: see (53). However, object control is possible when the inflection on the embedded verb is incompatible with subject control, as in (b). An alternative reading, in this case, is the split antecedent reading.

- (53) a. Pekka₁ muistutti Juhania₂ että Ø_{1/2} oli luvannut leikata nurmikko.
 Pekka reminded John that had promised mow lawn
 ‘Pekka reminded John that he had promised to mow the lawn.’
- b. Pekka₁ muistutti lapsia₂ että Ø_{*1/2/1+2} olivat luvanneet leikata nurmikko.
 Pekka reminded children that had-3PL promised-PL mow lawn
 ‘Pekka reminded the children that they (the children or him and the children) had promised to mow the lawn.’

BP exhibits a slightly different situation: subject control is preferred but split antecedents are possible when the agreement morphology is incompatible with the subject. Under no circumstances can the in-situ object serve as antecedent (even if a predicate is phi-matched with the object but not the subject):

- (54) a. O Pedro₁ convenceu o João₂ que Ø_{1/*2} tinha que ir embora. (Modesto 2000)

the Pedro convinced the João that had to go away

‘Pedro₁ convinced João that he₁ had to leave.’

- b. *O Pedro₁ convenceu a Maria₂ que Ø₂ era esperta

the Pedro convinced the Maria that was smart.F

‘Pedro convinced Maria that she was smart.’

- b. O Zé₁ convenceu os meninos₂ que Ø_{*1/?2/1+2} tinham que ir embora

the Ze convinced the kids that had to go away

Ze convinced the kids that they had to leave.’

An interesting observation, due to Modesto (2000, in press) is that object control is preferred in BP, too, if the object is wh-moved or topicalized.

- (55) Quem₂ que o Pedro₁ convenceu t₂ que EC₂ tinha que ir embora?

Who₁ that the Pedro₂ convinced that had that go away?

‘Who did Pedro convince that he had to leave?’

As discussed by Modesto (in press) Finnish exhibits a similar, though not identical, situation: Object control improves if the object is wh-moved or topicalized, but only marginally.

- (56) ?Ketä₁ Pekka muistutti t₁ että (hän₁) oli luvannut leikata nurmikkaa.

who Pekka reminded that he had promised mow lawn

‘Who₁ did Pekka remind that he₁ had promised to mow the lawn?’

Thus in Marathi, the object is the preferred controller of an embedded null subject with a verb of communication, whereas in BP and Finnish, the subject is preferred binder, unless the object is fronted, in which case it too becomes a possible binder. An interesting possibility is that this is related to an obvious parametric difference between Marathi on the one hand, BP and Finnish on the other: OV vs. VO (see Nayudu 2008). Two assumptions are required: (a) Clausal complements of this class of verbs are adjuncts (Ferreira 2004), and (b) OV order is derived by object movement out of VP (Zwart 1994, 1997). The result is that, in the unmarked case, the object will c-command the clausal complement (from its derived preverbal position) in the OV language Marathi, but not in the VO languages BP and Finnish. For this reason, the object is the preferred binder in Marathi, but not in BP or Finnish. This is supported by Modesto's observation concerning object movement in BP and Finnish: When the object moves out of VP, it becomes the preferred controller in BP and Finnish, too.

There is considerable evidence for the idea that the embedded CP is an adjunct, at least in Finnish and Brazilian Portuguese, from the behaviour of epithet subjects, extraction facts, clausal expletive insertion (cf. Rodrigues 2004 for an overview).¹⁹

This is a clear example of parametric interaction. The OV status of Marathi means that its object occupies a higher position in the clause and as such has the possibility to bind where objects in VO languages do not.

5.6 Summary of verb type facts

Table 4: The possibility of null subjects with different verb types

Verb type	<i>pro</i> control pattern in Marathi	<i>pro</i> control pattern in BP and Finnish	PRO control pattern
Commissive (promise)	Subject control across	Subject control across	Subject control, across

	object	object	object
Epistemic (say)	Subject control	Subject control	No non-finite complements
Factive (regret)	Subject control impossible	Subject control	Subject control
Desiderative (want)	No finite control	No finite control	ECM
Directive (recommend)	Object control impossible	Object control marginally possible	Object control
Communicative (inform)	Subject and object control possible	Subject control only, unless object is fronted	No non-finite complements

Once again, it is obvious from the chart that once the OV interaction is controlled for, the control relation in the three languages under discussion forms a class, distinct from the phenomenon of OC.

6 Island sensitivity

The biggest differences between the three languages arise in relation to island effects. While all three languages allow bound null subjects in adjuncts and embedded questions, Marathi fails to allow null subjects in any kind of DP. Finally, only Finnish allows bound null subjects in relative clauses. We include this information here for completeness, though the reason for these differences remain opaque to us at present.

6.1 Adjunct clauses.

All three languages allow control into finite adjunct clauses (SUBJ = subjunctive).

- (57) a. O João pode vir, desde que (ele) termine o trabalho.

The John may come, since that he finishes-SUBJ the job

‘John can come, if he finishes the job (first).’

- b. Eeva saa tulla mukaan jos (hän) lupaa olla hiljaa.

Eeva may come along if she promises be quiet

- c. John khush hota karan (tya-la) pushkar bheti milyala

John happy be-past3sm because (he-ACC) very gifts receive-past3plf

‘John was happy because he received many gifts.’

6.2 Indirect questions.

BP, Finnish, and Marathi allow control into embedded questions, at least marginally.²⁰

- (33) a. O João perguntou se (ele) podia dormir aqui.

The John asked if he could sleep here

‘John asked if he could stay the night.’

- b. Jari haluaa tietää saako (hän) jäädä yöksi.

Jari wants know can-Q he stay night-TRA

‘Jari wants to know whether he could stay the night.’

- c. John-ni vicharle ki (to) ratri rahu shakto ka?

John-ERG ask-past-3SN that (he) night stay happen-PRS-3SM Q

‘John asked whether he could stay the night.’

6.3 Noun complements and factive clauses.

BP and Finnish both allow control into the finite clausal complement of a noun selected by a verb, Marathi does not. (59) exemplifies a very common form of verb complementation in Finnish, where the complement is headed by the pronoun *se* ‘it’ (appropriately inflected).

- (58) a. O João₁ se esquece do fato de que (ele)₁ vai ganhar menos no novo emprego.
 The John SE forgets of.the fact of that will earn less in.the new job
 ‘John forgets about the fact that he’ll earn less in his new job.’
- b. O presidente₁ negou os rumores de que (ele)₁ tinha
 The president denied the rumors of that he had
 recebido dinheiro de empresários
 received money from businessmen.’
 ‘The president denied the rumours that he had received money from businessmen.’
- [example from Modesto (2000:99)]

- (59) a. Anu ei usko väitteeseen että (hän) olisi maksanut autostaan liikaa.
 Anu not believes claim that she has-CON paid car-ABL-her too-much
 ‘Anu doesn’t believe the claim that she would have paid too much for her car.’
- b. Jari valitti meille siitä että (hän) joutui maksamaan autostaan
 Jari complained us-ALL it-ABL that he had-to pay car-ABL-his
 liikaa.
 too-much
 ‘Jari complained to us about the fact that he had to pay too much for his car.’

- (60) John-la [hi goshta ki *(tyan-ni) ti-la dukhavla] mahiti nahvti
 John-acc the fact that he-ERG she-ACC offended was-aware not
 ‘John wasn’t aware of the fact that he had offended her.’

Since DP objects undergo fronting to pre-VP position, deriving SOV order, in Marathi but not in BP or Finnish (see Nayudu 2008), an initially attractive idea is that this fronting is the reason why control into noun clauses is impossible in Marathi, unlike BP and Finnish. However, another difference is that Marathi also does not allow control into finite factive clauses, while BP and Finnish do.

- (61) a. A Maria₁ sente muito que (ela₁) tenha chegado/chegou tarde.
 the M feels a lot that she has-SUBJ arrived/arrived late
 ‘Maria regrets that she has arrived late.’
 b. Jari₁ katuu että (hän₁) tuli takaisin.
 Jari regrets that he came back
 c. Ram-la pashchyatap hota ki *(to) parat aala
 Ram-ACC regret was that he back came
 ‘Ram regretted that he came back.’

It seems fairly uncontroversial to assume that factive clauses are underlying nominal clauses, headed by an abstract noun meaning ‘fact’. If so, the correct generalisation is that Marathi fails to allow a controlled null subject in any finite nominal clause. Factive clauses as in (61) are not fronted, though, so the fronting as such would not be crucial.

6.4 Relative clauses.

Of the three languages, only Finnish allows control into relative clauses.

- (58) a. Pekka rikkoi maljan jonka (hän) oli saanut lahjaksi sukulaisiltaan.
 Pekka broke vase which (he) had got gift-TRA relatives-ABL
 ‘Pekka broke the vase that he had got as a gift from his relatives.’
- b. John-ni₁ masale tya sauce-madhe misalavale dzo *(tyan-ni)₁ aadhi-cha
 John-ERG herbs that sauce-in mixed that he-ERG earlier-EMPH
 kelela.
 prepared
 ‘John mixed the herbs in the sauce that he had prepared earlier.’

In the case of Marathi this falls under the generalization that control into nominal complements is not allowed. For BP there must be a different explanation, though, since BP allows control into nominal complements.

6.5 Summary of island facts

Table 5: island sensitivity in partial null subjects and with obligatory control

Context	<i>Pro</i> in Marathi	<i>Pro</i> in Brazilian Portuguese	<i>Pro</i> in Finnish	PRO in English
grammatical in embedded questions	Y	Y	Y	Y
grammatical in	Y- subject only	Y – subject only	Y- subject only	Y

adjunct CPs				
Factive CP complements	N	Y	Y	Y John regretted having cut himself/*oneself
grammatical in nominal complements	N	Y	Y	Y J had the desire to hurt himself/*oneself
grammatical in object rel. clauses	N	N	Y	Y – every man wants something to devote himself to

The languages in question differ with respect to their degree of island sensitivity. Marathi is more sensitive to islands than the other two languages, in particular to all kinds of ‘complex NP’ (or DP) islands. Finnish displays no island-sensitivity at all. If both OC and the control relation in partial null subject languages is an effect of agree, then the island sensitivity in BP and Marathi must be due to intervention or to some independent fact about their grammar. We leave these matters to future research.

7 The control typology

There are differences among the three languages as regards control of a null subject in embedded finite clauses. Marathi, for some reason, does not allow control into any type of DP. Furthermore, Marathi prefers object control in at least one case where BP and Finnish do not. However, we have argued that at least the second of these differences can be ascribed to the OV nature of Marathi (and we mentioned the possibility that the first one could, as well). The general impression is, then, that we are dealing with variations on a theme: Control of a null subject in finite clauses is essentially the same phenomenon, subject to the same constraints, in the three

languages, with variations that are (at least some of them) due to independent parametric differences among the languages.

A comparison with control of PRO in non-finite clauses yields an unambiguous conclusion: Control of a null subject in finite clauses in BP, Finnish, and Marathi is not OC. The locality conditions are not as strict as for OC, the behaviour with different verb types is different, the possibility of split antecedents is incompatible with OC, as is the strict reading under ellipsis and the coreferential reading in the *only*-construction (at least in Finnish and Marathi). Since we have proposed that the control relation in BP, Finnish and Marathi is also due to agree, it remains to be clarified, therefore, how these manifold differences arise.

Landau (2004) proposes a control calculus to derive the types of clauses which can license –R pronouns like PRO. He argues that PRO is restricted to environments which lack +T and +Agr after checking between I and C. This has the effect of restricting PRO to non-finite and dependent tense subjunctive clauses. The distribution of uD pronouns in partial null subject languages cannot be captured by this control calculus, as they specifically do not occur in the contexts where PRO occurs in other languages. As such, they have the distribution of normal +R pronouns, despite the fact that they need to be controlled.

In OC, following Landau, the control relation is essentially agree between a –R pronoun (PRO) and an antecedent, but crucially this agree relation is mediated by a head F (v or T) in the higher clause. This means that the relation is very local (strictly ‘next clause up’), as every clause has v or T.²¹ The type of relation we are proposing, holding between a [uD] null subject in a finite clause and its antecedent in our three partial null-subject languages, is in many ways similar to that proposed by Landau. The uD feature of the null pronoun, which makes it incapable of independent reference, needs to enter into an agree relation with a DP, making it

similar to Landau's –R pronouns. Crucially, though, a [uD] pronoun agrees directly with its antecedent (and not via an intermediate head F) and is thus subject to c-command and intervention effects.

How does agree manage to cross the CP phase boundary, though (avoiding the 'Phase Impenetrability Condition')? The logic of phase theory dictates that the null pronoun moves to the edge of the CP phase, where it will be visible to the DP arguments in the next clause/next phase. However, this still predicts stricter locality than we actually find. Recall that all three languages allowed, at least marginally, the null subject to be controlled by an antecedent two clauses up, provided that there was no intervening DP (see (26); (26) is repeated here as (62):

- (62) A Maria₁ disse [que é verdade [que (ela)₁ entornou o copo]] [BP]
 the Maria said that is true that she knocked over the glass
 'Maria said it's true that she knocked over the glass.'

Successive cyclic movement of the null pronoun is not an attractive solution for at least two reasons. One is that control is possible into finite clauses which are strictly islands for movement: adjunct clauses (all languages), DP-embedded clauses (BP and Finnish), and even relative clauses (Finnish). The other is that a movement account fails to predict the effect of an intervening DP (see (24); (24) is repeated here as (63):

- (63) O João₁ disse [que os moleques acham [que *(ele)₁ é esperto]]
 the João said that the kids think that he is smart
 'João said that the children think that *he/ is smart.'

Successive cyclic A-bar movement is not hindered by intervening subjects or objects.

We are led to acknowledge that spell-out of the uD-marked pronoun at the edge of CP1 in (64) can wait until a DP is merged in CP3, provided that there is no c-commanding DP in CP2.

(64) [CP3 ... DP ... [CP2 ... [CP1 [uD] C TP]]]

How to accommodate this fact within a phase-based theory of locality is something we will have to leave for future research.

8 Conclusions

BP, Finnish, and Marathi, as partial null subject languages, allow null subjects: (i) with non thematic predicates, (ii) with a generic interpretation and (iii) in embedded contexts. Type (ii) are the result of incorporation of a non-referential pronoun into T, and type (iii) are licensed under agree with a c-commanding DP. These uD pronouns are not restricted to clauses with dependent tense, and hence their distribution is not regulated by Landau's control calculus. Rather, their grammaticality is regulated only by the requirement that they be bound by the closest c-commanding antecedent. Marathi for some reason, does not allow these null subjects in DPs, and BP fails to allow null subjects in relative clauses, but apart from this the licensing of these null subjects is not subject to island effects, as is the case with OC, which is also an agreement relation. Differences between OC and the control relation described here stem from the fact that OC is mediated by the heads *v* and T, whereas the binding of null subjects in partial null subject languages is not.

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¹ Actually, matters are slightly more complex than this as Brazilian Portuguese does allow null subjects in contexts such as these, through a process of Topic deletion. Crucially, however, it does not allow null subjects with a non c-commanding antecedent in island configurations. See Sheehan (2006: ch4) for a discussion.

² Bengali and Hindi, two languages closely related to Marathi, appear to belong in the first category, being more permissive than Marathi, BP and Finnish, while Icelandic, being less permissive than Marathi, BP, and Finnish, belongs in the second category, and at least some varieties of European Portuguese belong in the third category.

³ See also Vainikka & Levy (1999), Holmberg (2005, Chapter 4).

⁴ Duarte (1995) discusses the situation for BP amongst young people, claiming that the null subject, for young people has become “pra quando a gente escreve”(for when we write), and the overt subject “pra quando a gente fala” (for when we speak) (Duarte 1995:143).

⁵ See Huang (2000: 51ff.) on the typology of null subjects. Rizzi (1982, 1986) discusses what he calls semi-pro-drop languages, which would have only non-thematic null subjects. A further distinction among the semi-pro-drop languages, proposed by Rizzi (1986) and discussed by Huang (2000), is between languages which allow null subjects with weather verbs (quasi-argumental null subjects, for example Icelandic) and those which only allow purely expletive null subjects (German). As it happens, German is not a partial null subject language in our sense, as it does not have a null generic subject. Icelandic is, as it has a null generic subject, although it does not have controlled null subjects in finite clauses; see Sigurðsson & Egerland (in press). On Icelandic, see Holmberg (Chapter 3).

⁶ Expletives are not excluded in principle, though. Finnish employs an expletive subject in certain constructions as an alternative way to satisfy the EPP; see Holmberg & Nikanne (2002).

⁵ The counterpart of (7c) and (8c) is not possible in BP with a null subject. Either a clitic or DP like ‘the people’ is needed in such circumstances:

- (i) *(A gente/se) deve respeitar as opiniões dos jovens.
 the people/SE must respect the opinions of-the young

This is presumably because, unlike Finnish and Marathi, BP cannot have the object DP satisfy the EPP. We will leave aside a discussion of such differences in this paper.

⁸ It should be noted, also, that BP also uses the clitic ‘se’ and that its presence seems to satisfy the EPP. We leave these complications to one side here.

⁹ We exclude radical null subject languages from our discussion here, believing them to lack \bar{A} features altogether, and perhaps D. As such, the implicit assumption is that they are immune to the absence/presence of [uD] features on T and the +/- status of the [PF] sensitive EPP. See Roberts and Holmberg (Introduction) for a discussion.

¹⁰ We exclude from the discussion, the null subjects which occur in answer to yes/no questions in many languages. See Holmberg (2001, 2007) for an ellipsis analysis of these constructions which is independent of the null subject parameter.

¹¹ Cf. Kornfilt (1985)

¹² But see Roberts (Chapter 7) for the proposal that French is actually a partial pro-drop language.

¹³ Cf. Lindseth (1998)

¹⁴ Somali subject clitics seem to be obligatory in the absence of a DP subject, optional with referential subjects, and banned with quantificational subjects (Saeed 1996:165-166). The language also has overt impersonal subject clitics (Saeed 1996: 76, Cabredo Hofherr 2004) and overt expletives (Rebusci and Tuller 1999:275-309).

¹⁵ Holmberg (2005) notes that a null subject is blocked with non-human antecedents in the following context:

- (1) a. Jarille tuli selväksi ettei (hän) saa palkintoa.
 Jari-ALL became clear that-not he gets prize
 ‘It became clear to Jari that he won’t get a prize
- b. Kirjasta tuli selväksi ettei *(se) saa palkintoa.
 book-ABL became clear that-not it gets prize
 ‘It became clear from the book that it won’t get a prize.’

The crucial difference between (i) and (19) may be that there is an implicit experiencer (hence human) argument, between the antecedent and the null pronoun in (ib) but not in (19).

¹⁶ We thank Ian Landau for suggesting this possibility to us.

¹⁷ The examples with a non-c-commanding antecedent listed in Holmberg (2005) are all predicational constructions, as pointed out to us by Idan Landau (p.c.).

¹⁸ The test from ‘only NP’ has been adapted to Marathi this way because for some reason the focusing adverb *musta* ‘only’ scoping narrowly over the matrix subject prevents control of a null subject in the embedded clause.

¹⁹ This obviously raises a number of questions. Perhaps the most pressing one is how it is possible for the object to control the null subject in (54b) and (55b)? We will leave this question and other related questions for future research.

²⁰ Control into indirect questions is possibly less marginal in BP than in Finnish and Marathi.

²¹ In Landau’s (2000, 2004) terms, control is possible across a phase-boundary because the –R feature of PRO is interpretable and PRO is thus ‘visible to agree from the outside’ (Landau 2004: 843, fn 26).